

What is claimed is:

1. A printing apparatus comprising:  
an ejection head for selectively ejecting ink droplets of  
5 a plurality of sizes to form dots on a printing medium;  
wherein  
said printing apparatus is capable of printing a correction  
pattern on said printing medium, said correction pattern enabling  
correction of a misalignment between a position at which dots are  
10 formed during a forward pass through which said head is moved and  
a position at which dots are formed during a return pass through  
which said head is moved, and  
a spacing in a sub-scanning direction between dots that make  
up said correction pattern printed by ejecting ink droplets of  
15 a certain size from said ejection head is different from a spacing  
in the sub-scanning direction between dots that make up said  
correction pattern printed by ejecting ink droplets of a different  
size from said ejection head.
- 20 2. A printing apparatus according to claim 1, wherein  
said correction pattern has a plurality of sub-patterns,  
and  
each sub-pattern is made of dots arranged in a main-scanning  
direction and the sub-scanning direction.
- 25 3. A printing apparatus according to claim 2, wherein  
each said sub-pattern has forward-pass dots that are formed  
with a predetermined spacing therebetween during the forward pass  
through which said head is moved and return-pass dots that are  
30 formed with a predetermined spacing therebetween during the

return pass through which said head is moved, and

an amount of misalignment between a position at which the forward-pass dots are formed and a position at which the return-pass dots are formed is different for each sub-pattern.

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4. A printing apparatus according to claim 1, wherein a spacing in a main-scanning direction between the dots forming said correction pattern is the same regardless of said size.

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5. A printing apparatus according to claim 3, wherein said predetermined spacing is at least twice the spacing in the sub-scanning direction between the dots.

15 6. A printing apparatus according to claim 3, further comprising:

a density detection member for detecting a density of said sub-patterns;

wherein

20 the misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through which said head is moved is corrected based on a result of the density detected by said density detection member.

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7. A printing apparatus comprising:

an ejection head for selectively ejecting ink droplets of a plurality of sizes to form dots on a printing medium;

wherein

30 said printing apparatus is capable of printing a correction

pattern on said printing medium, said correction pattern enabling correction of a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through  
5 which said head is moved,

a spacing in a sub-scanning direction between dots that make up said correction pattern printed by ejecting ink droplets of a certain size from said ejection head is different from a spacing in the sub-scanning direction between dots that make up said  
10 correction pattern printed by ejecting ink droplets of a different size from said ejection head, and

said printing apparatus is capable of

receiving command information from a user based on said correction pattern, and,

15 based on the command information, correcting a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through which said head is moved.

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8. A printing apparatus comprising:

an ejection head for selectively ejecting ink droplets of a plurality of sizes to form dots on a printing medium;

wherein

25 said printing apparatus is capable of printing a correction pattern on said printing medium, said correction pattern enabling correction of a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through  
30 which said head is moved,

a spacing in a sub-scanning direction between dots that make up said correction pattern printed by ejecting ink droplets of a certain size from said ejection head is different from a spacing in the sub-scanning direction between dots that make up said  
5 correction pattern printed by ejecting ink droplets of a different size from said ejection head,

said correction pattern has a plurality of sub-patterns,  
each sub-pattern is made of dots arranged in a main-scanning direction and the sub-scanning direction,

10 each said sub-pattern has forward-pass dots that are formed with a predetermined spacing therebetween during the forward pass through which said head is moved and return-pass dots that are formed with a predetermined spacing therebetween during the return pass through which said head is moved,

15 an amount of misalignment between the forward-pass dots and the return-pass dots is different for each sub-pattern,

a spacing in the main-scanning direction between the dots forming said correction pattern is the same regardless of said size,

20 said predetermined spacing is at least twice the spacing in the sub-scanning direction between the dots,

said printing apparatus further comprises a density detection member for detecting a density of said sub-patterns,  
and

25 the misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through which said head is moved is corrected based on a result of the density detected by said density detection member.

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9. A correction pattern comprising:

forward-pass dots that are formed by an ejection head during a forward pass through which said head is moved, said ejection head being capable of selectively ejecting ink droplets of a plurality of sizes to form dots on a printing medium; and

return-pass dots that are formed by said ejection head during a return pass through which said head is moved;

wherein

said correction pattern is for correcting a misalignment between a position at which the forward-pass dots are formed and a position at which the return-pass dots are formed, and

a spacing in a sub-scanning direction between dots that make up said correction pattern printed by ejecting ink droplets of a certain size from said ejection head is different from a spacing in the sub-scanning direction between dots that make up said correction pattern printed by ejecting ink droplets of a different size from said ejection head.

10. A computer system comprising:

a computer main unit; and

a printing apparatus that has an ejection head for selectively ejecting ink droplets of a plurality of sizes to form dots on a printing medium, is connected to said computer main unit, and is capable of performing printing to the printing medium; and

wherein

said computer system is capable of printing a correction pattern on said printing medium, said correction pattern enabling correction of a misalignment between a position at which dots are formed during a forward pass through which said head is moved and a position at which dots are formed during a return pass through

which said head is moved, and

a spacing in a sub-scanning direction between dots that make up said correction pattern printed by ejecting ink droplets of a certain size from said ejection head is different from a spacing  
5 in the sub-scanning direction between dots that make up said correction pattern printed by ejecting ink droplets of a different size from said ejection head.